

1 I claim:

- 2 1. An LED light apparatus for producing a collinear beam of white or colored
- 3 light comprising:
 - 4 a housing;
 - 5 at least three sets of LED light assemblies contained within said housing, wherein
 - 6 each of said sets of LED light assemblies is comprised of a plurality of LED lights,
 - 7 said LED lights being arranged in a geometric pattern, and wherein said LED lights
 - 8 contained within each of said sets of LED light assemblies are of the same color,
 - 9 said LED lights being of different colors between said sets of LED light assemblies;
 - 10 a dichroic bandpass filter located between said sets of LED light assemblies;
 - 11 a dichroic notch filter located between said sets of LED light assemblies intersecting
 - 12 said dichroic bandpass filter;
 - 13 a power driver connected to each of said sets of LED light assemblies; and
 - 14 a microcontroller connected to said power driver.
- 15 2. The LED light apparatus for producing a collinear beam of white or colored light
- 16 of Claim 1 wherein said at least three sets of LED light assemblies contain LED
- 17 lights of blue, red, and green forming blue LED light assembly, red LED light
- 18 assembly, and green LED light assembly.
- 19 3. The LED light apparatus for producing a collinear beam of white or colored light
- 20 of Claim 1 wherein the perimeter of said housing comprises a plurality of heat sinks
- 21 to dissipate heat from said LED light apparatus.

1 4. The LED light apparatus for producing a collinear beam of white or colored light
2 of Claim 2 wherein said housing incorporates a light emission screen for emitting the
3 produced collinear beam of white or colored light.

4 5. The LED light apparatus for producing a collinear beam of white or colored light
5 of Claim 4 wherein said blue LED light assembly is arranged at right angles to said
6 red LED light assembly.

7 6. The LED light apparatus for producing a collinear beam of white or colored light
8 of Claim 5 wherein said green LED light assembly is arranged at right angles to said
9 red LED light assembly.

10 7. The LED light apparatus for producing a collinear beam of white or colored light
11 of Claim 6 wherein said dichroic bandpass filter is at a 90 degree angle with said
12 dichroic notch filter.

13 8. The LED light apparatus for producing a collinear beam of white or colored light
14 of Claim 7 wherein said green LED light assembly and said blue LED light assembly
15 are placed on opposing sides of each other.

16 9. The LED light apparatus for producing a collinear beam of white or colored light
17 of Claim 1 wherein said geometric pattern is an a x a pattern.

18 10. The LED light apparatus for producing a collinear beam of white or colored light
19 of Claim 1 wherein said geometric pattern is an a x b pattern.

20 11. The LED light apparatus for producing a collinear beam of white or colored light
21 of Claim 1 wherein said geometric pattern is a honeycomb pattern.

1 12. The LED light apparatus for producing a collinear beam of white or colored light
2 of Claim 1 wherein said geometric pattern is a hexagon pattern.

3 13. The LED light apparatus for producing a collinear beam of white or colored light
4 of Claim 1 wherein said dichroic bandpass filter and said dichroic notch filter
5 intersect to form an x-pattern.

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